Goal 6: Reduction of Global and Cross-Border Environmental Risks

The United States will lead other nations in successful, multilateral efforts to reduce significant risks to human health and ecosystems from climate change, stratospheric ozone depletion, and other hazards of international concern.

Background and Context

Many serious environmental risks transcend political boundaries. Consequently, protecting human health and the environment in the United States requires coordination and cooperation at a multinational level. Ecosystems, such as the Great Lakes, are essential to the health and welfare of U.S. citizens, are shared by neighboring countries, and can be preserved only through joint action. Other environmental risks-related to climate change, arctic environments, and biodiversity - are global in scope, and can affect the health and welfare of all those who live in the United States both directly and indirectly. These and other threats, unbounded by national borders, need to be addressed on an international scale.

International environmental management programs provide important political and economic benefits. A significant portion of EPA's international work fulfills legally binding treaties, conventions and other international statutory mandates. Sharing regulatory and technological expertise helps the United States, other industrialized nations, and developing nations achieve development consistent with the goals of protecting human health and the environment. As developing nations progress economically, their use of sound environmental practices will prevent the need for costly cleanup and restoration in the future. In addition, the development of effective environmental management and regulatory regimes throughout the world helps ensure that U.S. companies are not competitively disadvantaged by developing nations who otherwise may opt for rapid, inexpensive economic growth at the expense of the environment.

Means and Strategy

To reduce environmental and human health risks along the U.S./Mexico Border and the Great Lakes, EPA employs both voluntary and regulatory measures. Efforts in the U.S./Mexico Border Area utilize a series of workgroups that focus on priority issues ranging from water infrastructure and hazardous waste to outreach efforts focusing on communities and businesses in the border area. The programs were initially conceived in a Federal-to-Federal context. While this may have been appropriate at the start, it is clear that today in both countries, non-Federal governments are the appropriate entities for developing and carrying out much of the work of protecting the border environment. The experience of the last six years has shown U.S. border states as key participants in workgroup activities with similar experience on the Mexico side. In the past year all border states have stressed the need for greater decentralization of environmental authority, and in FY 1999, states and the Federal governments agreed to a set of principles that clarify the roles of the governments and advance state and Tribal participation. Under a new environmental plan developed with SEMARNAP (EPA's Mexican counterpart), targeted for completion by December 2002, the states and Tribes will play a more substantial and meaningful role in:

- determining how Federal border programs are developed and funded;
- focusing on developing regional workgroups that empower border citizens; and
- ensuring that programs devolve from Mexico's Federal government to the Mexican states, with corresponding funding.

The 2001 Great Lakes Strategy, developed by EPA's Great Lakes National Program Office (GLNPO) and Federal, state, and Tribal agencies in consultation

with the public, advances U.S. Great Lakes Water Quality Agreement implementation. Its long-range vision (a healthy natural environment where all beaches are open for swimming, all fish are safe to eat, and the Lakes are protected as a safe source of drinking water) is supported by Lakewide Management Plans and Remedial Action Plans for Areas of Concern. Progress is measured through the Integrated Atmospheric Deposition Network and GLNPO's open water, fish, and sediments monitoring. To prevent degradation of the marine environment, the Agency, in conjunction with the Department of State, the National Oceanic and Atmospheric Administration (NOAA), and other Federal agencies, is focusing on the negotiation and implementation of legally-binding multilateral agreements. These agreements are designed to address sources of marine pollution that impact the United States.

EPA will meet its climate change objectives by both working with business and other sectors to deliver multiple benefits - from cleaner air to lower energy bills - while continuing to improving overall scientific understanding of climate change and its potential consequences. The core of EPA's climate change efforts are government/industry partnership programs designed to capitalize on the tremendous opportunities available to consumers, businesses, and organizations to make sound investments in efficient equipment and practices. These voluntary programs remove barriers in the marketplace, resulting in faster deployment of energy efficient technology into the residential, commercial, transportation, and industrial sectors of the economy. Through the Clean Automotive Technology initiative, EPA will work with industry to develop and commercialize fuel-efficient hydraulic hybrid and advanced engine technologies that will utilize EPA developed technologies.

EPA is also engaged in working with key developing countries and economies- in- transition to provide capacity building and technology transfer in areas of air quality, transportation, clean energy use and energy efficiency, and cleaner production. Working hand-in-hand with international partners, these joint activities support more sustainable practices and lead to greenhouse gas emissions reductions as well as build local technical capacity for developing countries to take on commitments to reduce greenhouse gas emissions under the 1992 Climate Convention. EPA's activities provide information sharing and training and contribute to the fulfillment of U.S. commitments under the Climate Convention to facilitate technology transfer to developing countries.

In order to restore and protect the earth's stratospheric ozone layer, EPA will work on both domestic and international fronts to limit the production and use of ozone-depleting substances and to develop safe alternative compounds. EPA will also provide education about the risk of environmental and health consequences of overexposure to ultraviolet (UV) radiation.

To address the risks associated with persistent and bioaccumulative substances and other toxics, the Agency employs two fundamental approaches. The first approach seeks to minimize the harmful impacts of toxic substances known to circulate in the environment over long distances through the negotiation and implementation of specific treaties. The second approach focuses on the cooperative efforts of the Organization for Economic Cooperation and Development (OECD) and other international organizations working to develop harmonized methods for testing and assessing the toxicity of chemicals, and for measuring the effects of chemicals to humans and the environment.

In addition to the specific strategies noted above, the Agency employs a variety of means to achieve the environmental objectives outlined in this goal. These include:

- Implementing formal bilateral and multilateral environmental agreements with key countries, executing environmental components of key foreign policy initiatives, and, in partnership with the Department of State, engaging in regional and global negotiations aimed at reducing risks via formal and informal agreements.

- Working with other countries to ensure that domestic and international environmental laws, policies, and priorities are recognized and implemented.

- Partnering with other Federal agencies, states, business, and environmental groups to promote the flow of environmentally

sustainable technologies and services worldwide.

Research

EPA's Global Change Research Program contributes to the Agency's goal of reducing greenhouse gas emissions by providing the knowledge to allow policy makers to find the most appropriate, science-based solutions to reduce risks to human health and ecosystems posed by climate change (e.g., the impacts climate change could have on the spread of vector-borne and water-borne disease, as well as on air and water quality). The Agency is working to assess the vulnerability of human health and ecosystems to various environmental stressors (e.g., climate change, land-use change, UV radiation) at the regional scale, and to assess adaptation strategies.

External Factors

EPA's work to reduce global and cross-border environmental risks requires the cooperation of numerous governments and agencies around the world as well as non-governmental organizations and private sector parties. Accordingly, the level of success and the speed at which our objectives are achieved is highly influenced by external factors and events.

While many factors outside of EPA or U.S. control determine a nation's willingness to participate in international environmental protection efforts (e.g., economic or political considerations within the country), EPA's international policy and technical exchange programs can play an important role in convincing particular nations of both the need and feasibility of participating. Other factors affecting EPA's programs include continued Congressional and public support; cooperation with other Federal agencies, such as the State Department and the U.S. Agency for International Development; and collaboration with state and local groups, business and industry groups, and environmental organizations.

Reduction of air, water, wastewater and solid waste problems along the U.S. border with Mexico will require continued commitment by national, regional and local environmental officials in that country.

Progress on Great Lakes goals and measures is dependent on actions of others, both within and outside of the Great Lakes. Key Great Lakes partners, including Canada, state regulatory agencies, the Corps of Engineers, the National Oceanic and Atmospheric Administration (NOAA), the Fish and Wildlife Service (USFWS), and the Natural Resources Conservation Service (NRCS) must act together to continue environmental progress.

The U.S. Global Change Research Program (USGCRP) was established in 1990 by the U.S. Global Change Research Act. The 1990 Act mandates that the USGCRP conduct periodic assessments of the consequences of global change for the U.S. EPA is one of ten member agencies of the USGCRP. The EPA program relies on partnerships with academic institutions to fulfill its obligations to the USGCRP National Assessment effort.

EPA's efforts to reduce global and regional threats to oceans and the atmosphere require the active cooperation of other countries. Health and environmental benefits resulting from the multi-billion dollar investment by U.S. companies to reduce emissions of stratospheric ozone-depleting compounds could be completely undone by unabated emissions of these chemicals in other countries. Fortunately, the Montreal Protocol on Substances that Deplete the Ozone Layer has secured the participation of most countries, including major producers and consumers of these chemicals. Recovery of the stratospheric ozone layer is contingent upon international adherence to the commitments made under the Montreal Protocol. UV risk-reduction efforts are impacted by the rate of recovery of the ozone layer and socio-behavioral norms and attitudes regarding sun protection.

The success of international agreements on toxic substances is contingent on the developed world providing adequate levels of funding and timely technical assistance to developing countries, especially key source countries. Such funding and technical assistance is necessary in order for these countries to develop the necessary skill levels and infrastructure for ultimate success of these international efforts is contingent on not only the provision of policy and technical leadership by EPA and other Federal government entities, but also the ability to lead through the provision and leveraging of financial and technical assistance.

Resource Summary

(Dollars in Thousands)

	FY 2001 Actuals	FY 2002 Enacted	FY 2003 Request
Reduction of Global and Cross-border Environmental Risks	**$304,287.5**	**$276,588.0**	**$269,727.2**
Reduce Transboundary Threats to Human and Ecosystem Health in North America.	**$120,000.8**	**$96,869.4**	**$98,185.9**
Environmental Program & Management	$21,136.7	$21,869.4	$23,185.9
State and Tribal Assistance Grants	$98,864.1	$75,000.0	$75,000.0
Reduce Greenhouse Gas Emissions.	**$149,610.2**	**$145,293.6**	**$136,953.4**
Environmental Program & Management	$101,170.3	$96,767.2	$98,104.8
Science & Technology	$48,439.9	$48,526.4	$38,848.6
Reduce Stratospheric Ozone Depletion.	**$18,989.4**	**$15,843.2**	**$15,813.3**
Environmental Program & Management	$18,989.4	$15,843.2	$15,813.3
Protect Public Health and Ecosystems from PBTs and other Toxics.	**$4,772.6**	**$6,060.9**	**$6,173.6**
Environmental Program & Management	$4,772.6	$6,060.9	$6,173.6
Increase Domestic and International Use of Cleaner and More Cost-Effective Technologies.	**$10,914.5**	**$12,520.9**	**$12,601.0**
Environmental Program & Management	$10,914.5	$12,520.9	$12,601.0
Total Workyears	**549.7**	**517.7**	**504.7**

Objective 1: Reduce Transboundary Threats to Human and Ecosystem Health in North America

By 2005, reduce transboundary threats to human health and shared ecosystems in North America, including marine and Arctic environments, consistent with our bilateral and multilateral treaty obligations in these areas, as well as our trust responsibility to tribes.

Key Program

(Dollars in Thousands)

	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Administrative Services	$60.1	$0.0	$0.0	$0.0
Facilities Infrastructure and Operations	$0.0	$1,082.2	$1,127.7	$45.5
Great Lakes National Program Office	$15,266.3	$14,929.7	$15,128.2	$198.5
Legal Services	$422.5	$443.1	$476.2	$33.1
Management Services and Stewardship	$196.2	$333.4	$373.7	$40.3
Regional and Global Environmental Policy Development	$913.0	$931.5	$715.5	($216.0)
U.S. - Mexico Border	$4,384.2	$4,149.5	$5,364.6	$1,215.1
Water Infrastructure:Mexico Border	$74,835.0	$75,000.0	$75,000.0	$0.0

Annual Performance Goals and Measures

U.S. - Mexico Border Water/Wastewater Infrastructure

In 2003 Increase the number of residents in the Mexico border area who are protected from health risks, beach pollution and damaged ecosystems from nonexistent and failing water and wastewater treatment infrastructure by providing improved water and wastewater service.

In 2002 Increase the number of residents in the Mexico border area who are protected from health risks, beach pollution and damaged ecosystems from nonexistent and failing water and wastewater treatment infrastructure by providing improved water and wastewater service.

In 2001 Provided protection to over 576,405 residents in the Mexico border area from health risks, beach pollution and damaged ecosystems from nonexistent and failing water and wastewater treatment infrastructure by providing improved water and wastewater service.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Number of additional people in Mexico border area protected from health risks, because of adequate water & wastewater sanitation systems funded through Border Environmental Infrastructure Fund.	576,405	790,000	900,000	People

Baseline: There are approximately 11 million residents in the border area.

Great Lakes: Binational Toxics Strategy

In 2003 Reduce Great Lakes toxic pollutants.

In 2002 Reduce Great Lakes toxic pollutants.

In 2001 Reduced Great Lakes toxic pollutants by remediating over 400,000 cubic yards of contaminated sediment..

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Cubic yards of contaminated sediment remediated in the Great Lakes.	401,500	100,000	100,000	Cubic yards

Baseline: U.S. baselines for toxic pollutants are, in most cases, based on the most recent and appropriate inventory as of the Great Lakes Strategy's 1997 signing. In the case of mercury, for example, the most recent inventory is based on estimated emissions during the early 1990s. In September 1999, GLNPO quantified for the first time annual contaminated sediment remediation. GLNPO will continue to quantify contaminated sediment remediation annually.

Great Lakes: Ecosystem Assessment

In 2003 Great Lakes ecosystem components will improve, including progress on fish contaminants, beach toxics, air toxics, and trophic status.

In 2002 Great Lakes ecosystem components will improve, including progress on fish contaminants, beach toxics, air toxics, and trophic status.

In 2001 Great Lakes ecosystem components improved, including progress on fish contaminants, beach toxics, air toxics, and trophic status.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Long-term concentration trends of toxics (PCBs) in Great Lakes top predator fish.	Uncertain	Declining	5%	Annual decrease
Long-term concentration trends of toxic chemicals in the air.	Declining	Declining	7%	Annual decrease
Total phosphorus concentrations (long-term) in the Lake Erie Central Basin.	Improving	Improving	10	Ug/l
Long-term dissolved oxygen depletion trend in Lake Erie.		Limited	3.11	Mg/l

Baseline: Identified targets are currently based on historic trends. The trend (starting with 1972 data) for PCBs in Great Lakes top predator fish toxics is expected to be less than 2 parts per million (the FDA action level), but far above the Great Lakes Initiative target or levels at which fish advisories can be removed. The trend (starting with 1992 data) for PCB concentrations in the air is expected to range from 50 to 250 picograms per cubic meter. The trend (starting with 1983 data) for phosphorus concentrations is expected to range from 4 to 10 parts per billion, levels established in the Great Lakes Water Quality Agreement. The 1970 baseline of oxygen depletion of the Lake Erie central basin is 3.8 mg/liter/month. EPA is working with its partners to refine targets within the next 3 years.

Mexico Border Outreach

In 2003 Develop air quality assessments and improvement programs to attain air quality standards in border communities.

In 2003 Expand hazardous waste management and pollution prevention practices in the maquiladoras.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
U.S. cities along the Mexico Border region carrying out air emissions inventories.			1	cities
Number of maquiladoras that have implemented pollution prevention controls after a site assessment visit, workshop, or training session.			314	maquiladoras

Baseline: Many border area residents are exposed to health-threatening levels of air pollutants including ozone, particulate matter, carbon monoxide and sulfur dioxide. The need to evaluate levels of targeted air pollutants is particularly urgent in heavily populated urban areas where air quality problems are compounded by emissions from increasing numbers of vehicles - many of which are older and poorly maintained; extensive industrial activity; and numerous air sources (e.g., unpaved roads, waste disposal fires). To date seven out of the 14 sister-city pairs have air quality networks established and operating.

Verification and Validation of Performance Measures

Performance Measure: People in the Mexico border area protected from health risks because of adequate water and wastewater sanitation systems funded through the Border Environmental Infrastructure Fund. (cumulative)

Performance Database: No formal database

Data Source: 1) Population figures from 1990 U.S. Census; 2) Data for both U.S. and Mexican populations served by "certified" water/wastewater treatment improvements from the Border Environment Cooperation Commission (BECC); 3) Data on projects funded from the North American Development Bank (NADBank) 4) Status Report on the Water-Wastewater Infrastructure Program for the U.S.-Mexico Borderlands, January, 2001.

QA/QC Procedures: Headquarters is responsible for coordinating submission of and evaluating quarterly reports from EPA Regional Offices on these drinking water and wastewater sanitation projects.

Data Quality Review: Regional representatives attend meetings of the certifying and financing entities for border projects (BECC and NADBank) and conduct site visits of projects underway to ensure the accuracy of information reported.

Data Limitations: None

New/Improved Data or Systems: None

Performance Measure: Concentration trends of toxics (PCBs) in Great Lakes top predator fish. http://www.epa.gov/glnpo/glindicators/fishcontaminants.html

Performance Database: Great Lakes National Program Office (GLNPO) base monitoring program.

Data Source: GLNPO's ongoing base monitoring program, which has included work with cooperating organizations such as the Great Lakes States, USGS, and USFWS.

QA/QC Procedures: GLNPO has a Quality Management system in place which conforms to the EPA quality management order and is audited every 3 years in accordance with Federal policy for Quality Management.

Data Quality Review: GLNPO's quality management system has been given "outstanding" ratings in previous peer and management reviews. GLNPO has implemented all recommendations from these external audits and complies with Agency Quality standards.

Data Limitations: There is greater uncertainty regarding the representativeness of data pertaining to near shore areas because of the greater variability of the near shore environment. GLNPO will be able to quantify uncertainty for data in each reported area. In 2002, GLNPO is seeking documentation of how samples are collected and what they represent in order to quantify uncertainty for data in each reported area. Limitations of the field sampling and design information will be addressed through the field audits mentioned above. The field sampling aspects of the program are voluntary partnerships with the states, thus limiting Federal oversight.

New/Improved Data or Systems: The GLENDA database is a significant new system with enhanced capabilities. Existing and future fish data will be added to GLENDA.

Performance Measure: Concentration trends of toxic chemicals in the air.
http://www.epa.gov/glnpo/glindicators/atmospheric.html

Performance Database: Great Lakes National Program Office (GLNPO) integrated atmospheric deposition network (IADN) operated jointly with Canada.

Data Source: GLNPO and Canada are the principal sources of that data. Data also come through in-kind support and information sharing with other Federal agencies, with Great Lake States, and with Canada.

QA/QC Procedures: GLNPO has a Quality Management system in place which conforms to the EPA quality management order and is audited every 3 years in accordance with Federal policy for Quality Management.

Data Quality Review: GLNPO's quality management system has been given "outstanding" ratings in previous peer and management reviews. This program has a joint Canadian US quality system and workgroup that meets twice a year. GLNPO has implemented all recommendations from these external audits and complies with Agency Quality standards.

Data Limitations: The sampling design is dominated by rural sites that under emphasize urban contributions to deposition; thus although the data is very useful for trends information, there is less assurance of the representativeness of deposition to the whole lake. There are gaps in open lake water column organics data, thus limiting our ability to calculate atmospheric loadings.

New/Improved Data or Systems: GLNPO expects to post joint data that has passed quality review to < http://binational.net/ > , a newly created joint international web site.

Statutory Authorities

Clean Water Act
Clean Air Act
Toxic Substances Control Act
Resource Conservation and Recovery Act
Pollution Prevention Act
Federal Insecticide, Fungicide, and Rodenticide Act
Organotin Antifouling Paint Control Act
Annual Appropriation Acts

US-Canada Agreements
1997 Canada-U.S. Great Lakes Binational Toxics Strategy
1996 Habitat Agenda
1990 Great Lakes Critical Programs Act
1987 Great Lakes Water Quality Agreement
1987 Montreal Protocol on Ozone Depleting Substances
1978 Great Lakes Water Quality Agreement (GLWQA)
1909 The Boundary Waters Treaty
North American Free Trade Agreement

US-Mexico Agreements
North American Free Trade Agreement
LaPaz Agreement

Objective 2: Reduce Greenhouse Gas Emissions

By 2010, U.S. greenhouse gas emissions will be substantially reduced through programs and policies that also lead to reduced costs to consumers of energy and reduced emissions leading to cleaner air and water. In addition, EPA will carry out assessments and analyses and promote education to provide an understanding of the consequences of global change needed for decision making.

Key Program

(Dollars in Thousands)

	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Administrative Services	$234.6	$0.0	$0.0	$0.0
Climate Change Research	$22,550.4	$21,350.5	$21,729.3	$378.8
Climate Protection Program: Buildings	$52,535.0	$48,571.3	$49,820.5	$1,249.2
Climate Protection Program: Carbon Removal	$997.8	$1,549.7	$1,576.3	$26.6
Climate Protection Program: Industry	$31,929.6	$25,368.6	$25,673.1	$304.5
Climate Protection Program: International Capacity Building	$5,501.7	$6,982.8	$7,086.5	$103.7
Climate Protection Program: State and Local Climate Change Program	$2,494.5	$2,245.6	$2,275.2	$29.6
Climate Protection Program: Transportation	$29,435.1	$30,830.7	$21,567.2	($9,263.5)
Congressionally Mandated Projects	$1,371.9	$750.0	$0.0	($750.0)
Facilities Infrastructure and Operations	$4,612.6	$4,461.0	$4,019.1	($441.9)
Legal Services	$269.9	$328.2	$354.5	$26.3
Management Services and Stewardship	$2,525.1	$2,855.2	$2,851.7	($3.5)
Regulatory Development	$65.8	$0.0	$0.0	$0.0
Technical Cooperation with Industrial and Developing Countries	$762.0	$0.0	$0.0	$0.0

Annual Performance Goals and Measures

Reduce Greenhouse Gas Emissions

In 2003 Greenhouse gas emissions will be reduced from projected levels by approximately 73.5 MMTCE per year through EPA partnerships with businesses, schools, state and local governments, and other organizations thereby offsetting growth in greenhouse gas emissions above 1990 level by about 20%.

In 2002 Greenhouse gas emissions will be reduced from projected levels by approximately 65.8 MMTCE per year through EPA partnerships with businesses, schools, state and local governments, and other organizations thereby offsetting growth in greenhouse gas emissions above 1990 level by about 20%.

In 2001 The date for this annual performance goal will not be finalized until mid 2002.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Annual Greenhouse Gas Reductions - All EPA Programs	6/30/02	65.8	73.5	MMTCE
Greenhouse Gas Reductions from EPA's Buildings Sector Programs (ENERGY STAR)	6/30/02	17.2	19.5	MMTCE
Greenhouse Gas Reductions from EPA's Industrial Efficiency/Waste Management Programs	6/30/02	6.3	6.5	MMTCE
Greenhouse Gas Reductions from EPA's Industrial Methane Outreach Programs	6/30/02	16.3	17.5	MMTCE
Greenhouse Gas Reductions from EPA's Industrial HFC/PFC Programs	6/30/02	21.9	25.6	MMTCE
Greenhouse Gas Reductions from EPA's Transportation Programs	6/30/02	2.1	2.4	MMTCE
Greenhouse Gas Reductions from EPA's State and Local Programs	6/30/02	2.0	2.0	MMTCE

Baseline: The baseline for evaluating program performance is a forecast of U.S. greenhouse gas emissions in the absence of the Climate Change Action Plan programs. The baseline was developed as part of an interagency evaluation of the Climate Change Action Plan in 1997, which built on a similar baseline forecast that was developed in 1993 for the Climate Change Action Plan. The updated baseline includes energy forecasts and economic growth projections. The baseline is discussed at length in the Climate Action Report 1997, which includes a discussion of differences in baselines between the original Climate Change Action Plan and the 1997 baseline update. The baseline is currently under review as part of the interagency evaluation process for preparing the Climate Action Report 2001.

Reduce Energy Consumption

In 2003 Reduce energy consumption from projected levels by more than 95 billion kilowatt hours, contributing to over $11 billion in energy savings to consumers and businesses.

In 2002 Reduce energy consumption from projected levels by more than 85 billion kilowatt hours, contributing to over $10 billion in energy savings to consumers and businesses.

In 2001 The data for this annual performance goal will not be finalized until mid-2002.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Annual Energy Savings - All EPA Programs	On track	85	95	Billion kWh

Baseline: The baseline for evaluating program performance is a forecast of U.S. greenhouse gas emissions in the absence of the Climate Change Action Plan programs. The baseline was developed as part of an interagency evaluation of the Climate Change Action Plan in 1997, which built on a similar baseline forecast that was developed in 1993 for the Climate Change Action Plan. The updated baseline includes energy forecasts and economic growth projections. The baseline is discussed at length in the Climate Action Report 1997, which includes a discussion of differences in baselines between the original Climate Change Action Plan and the 1997 baseline update. The baseline is currently under review as part of the interagency evaluation process for preparing the Climate Action Report 2001.

Clean Automotive Technology

In 2003 Transfer hybrid powertrain components, originally developed for passenger car applications, to meet size, performance, durability, and towing requiremnts of Sport Utility Vehicle and urban delivery vehicle applications with an average fuel economy improvement of 20% over the baseline.

In 2002 Transfer hybrid powertrain components, originally developed for passenger car applications, to meet size, performance, durability, and towing requiremnts of Sport Utility Vehicle and urban delivery vehicle applications with an average fuel economy improvement of 15% over the baseline.

In 2001 Transfer hybrid powertrain components, originally developed for passenger car applications, to meet size, performance, durability, and towing requiremnts of Sport Utility Vehicle and urban delivery vehicle applications with an average fuel economy improvement of 10% over the baseline

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Fuel Economy of EPA-Developed SUV Hybrid Vehicle over EPA Driving Cycles Tested	22.2	23.2	24.2	MPG

Baseline: The average fuel economy of all SUVs sold in the US in 2001 is 20.2 mpg. Values for 2001, 2002, and 2003 represent 10%, 15%, and 20% improvements over this baseline, respectively. The long-term target is to demonstrate a practical and affordable powertrain that is 30% more efficient by 2005, and 100% more efficient by 2010.

Research

Global Change Research - Human Health and Ecosystem

In 2003 Assess the potential effects of climate change on weather-related morbidity.

In 2003 Build the capacity to assess global change impacts on air quality by downscaling meteorological data to regional scales and quantifying the effects of advanced fuel/vehicle combinations.

In 2002 Complete all contributing research and a report on the problem formulation phase of an assessment of the consequences of climate change on human health -- specifically, weather-related morbidity -- at the national and regional levels.

In 2002 Complete the problem formulation phase of an assessment of the consequences of global change on air quality at a regional level.

In 2002 Complete the problem formulation phase of an assessment of the consequences of global change on aquatic ecosystems at a regional level.

In 2001 Assessed the consequences of global change (particularly climate change and climate variability) on human health and ecosystems.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Report on the potential effects of climate change on urban air quality.	0			report
Preliminary report assessing potential health effects of global change by linking human health and ecological risk.	1			report
Complete initial assessment of air quality impacts of several potential transportation sector technology paths as input to a study of global change on tropospheric ozone concentrations.	1			assessment
External review draft on the effects of climate change on weather-related morbidity in the U.S.		1		report
External review draft of a report on the effects of global change on air quality in the US.		1		Draft report
Publish reports supporting analysis of the comparative risk of UV radiation and habitat quality to amphibian populations across N. America in support of US Global Change Research Program assessments.		09/30/2002		analysis
External review draft of a problem formulation report on the effects of global change on aquatic ecosystems in the U.S.		1		report
Produce a final, comprehensive assessment report which quantifies the potential effects of climate change on weather-related morbidity.			1	report
In support of the air quality assessments, produce interim assessment of how advancements in hydrogen/fuel cell and gasoline hybrid vehicles affect emissions of ozone precursors and PM.			1	assessment
Produce a preliminary analysis of meterological data and air quality using statistical methods.			1	analysis
Peer-reviewed reports for decision-makers and the public on the potential consequences of global change on 3 regions and on human health, which are the finished products of a multi-year effort.	3			reports

Baseline: In April 2000, the Health Sector Assessment Team participating in the first USGCRP National Assessment of the "Potential Consequences of Climate Variability and Change" published its Executive Summary. The entire assessment was published in May 2001 as a Special Issue of Environmental Health Perspectives. The Health Sector Assessment report identified key remaining research needs, which included weather-related morbidity effects. By the end of FY 2003, assessments will be completed of (1) heat-related morbidity in children; (2) the relationship between weather variability and violent crime; (3) the effects of inclement weather on accidents and injuries; and (4) the effects of extreme heat on emergency room visits and hospital admissions.

Air pollution continues to be a widespread public health and environmental problem in the United States. Previous studies suggest that global change
(climate change and variability, UV-radiation, land use change) could have significant impacts on ambient air quality. Global climate change will likely result in changes in regional and local weather. While few studies have explicitly investigated the effects of global change on air quality, the available evidence (e.g., weather-ozone studies, basic atmospheric chemistry, sensitivity of emissions to weather and land use, etc.) raises concerns that global change could adversely affect air quality. Two pollutants likely to be affected by global change are ozone and particulate matter and they are also of significant interest to the Agency. By the end of FY 2003, two important components of an integrated air quality assessment will be completed: (1) downscaling of global meteorological data to geographic scales appropriate for air quality assessments; and (2) quantification of the air implications of advanced fuel/vehicle combinations likely to be used to adapt to climate change.

Verification and Validation of Performance Measures

Performance Measure: Annual Greenhouse Gas Reductions

Performance Database: Baseline Data on Greenhouse Gas Emissions Climate Protection Division Tracking System.

Data Source: Baseline data for carbon emissions related to energy use comes from the Energy Information Agency (EIA). Baseline data for non-carbon dioxide ($CO_{2)}$ emissions, including nitrous oxide and other global warming potential gases are maintained by EPA. EPA develops the methane emissions baselines and projections using information from partners and other sources. EPA continues to develop annual inventories as well as update methodologies as new information becomes available. EPA's voluntary programs collect partner reports on facility specific improvements (e.g. space upgraded, kilowatt-hours (KWh) reduced.) A carbon-conversion factor is used to convert this information to estimated greenhouse gas (GHG) reductions. EPA maintains a "tracking system" for emissions reductions based on the reports submitted by partners.

QA/QC Procedures: EPA devotes considerable effort to obtaining the best possible information on which to evaluate emissions reductions from voluntary programs. For example, EPA has a quality assurance process in place to check the validity of partner reports.

Data Quality Review: Peer-reviewed carbon-conversion factors are used to ensure consistency with generally accepted measures of GHG emissions. The Administration regularly evaluates the effectiveness of its climate programs through interagency evaluations. The first such interagency evaluation, chaired by the White House Council on Environmental Quality, examined the status of the Climate Change Action Plan. The review included participants from EPA, the Department of Energy (DOE), the Department of Commerce (DOC), the Department of Transportation (DOT), and the U.S. Department of Agriculture (USDA). The results were published in the *U.S. Climate Action Report- 1997* as part of the United States' submission to the Framework Convention on Climate Change (FCCC). A 1997 audit by EPA's Office of the Inspector General concluded that the climate programs examined "used good management practices" and "effectively estimated the impact their activities had on reducing risks to health and the environment..."

Data Limitations**:** These are indirect measures of GHG emissions (carbon conversion factors and methods to convert material-specific reductions to GHG emissions reductions). Also, the voluntary nature of the programs may affect reporting. Further research will be necessary in order to fully understand the links between GHG concentrations and specific environmental impacts, such as impacts on health, ecosystems, crops, weather events, and so forth.

New/Improved Data or Systems: The Administration regularly evaluates the effectiveness of its climate programs through interagency evaluations.

Performance Measure: Annual Energy Savings

Performance Database: Climate Protection Division Tracking

Data Source: Voluntary energy efficiency programs collect partner reports on facility specific improvements (*e.g.,* space upgraded, kWh reduced).

QA/QC Procedures: EPA has a quality assurance process in place to check the validity of partner reports.

Data Quality Review: Peer-reviewed carbon-conversion factors are used to ensure consistency with generally accepted measures of greenhouse gas emissions. The Administration regularly evaluates the effectiveness of its climate programs through interagency evaluations. The first such interagency evaluation, chaired by the White House Council on Environmental Quality, examined the status of the Climate Change Action Plan. The review included participants from EPA, DOE, DOC, DOT, and USDA. The results were published in the *U.S. Climate Action Report-1997* as part of the United States' submission to the Framework Convention on Climate Change (FCCC). A 1997 audit by EPA's OIG concluded that the climate programs examined "used good management practices" and "effectively estimated the impact their activities had on reducing risks to health and the environment..."

Data Limitations: The voluntary nature of programs may affect reporting

New/Improved Data or Systems: The Administration regularly reviews the effectiveness of its climate programs through interagency evaluations.

Statutory Authorities

Clean Air Act, 42 U.S.C. 7401 et seq. - Sections 102, 103, 104, and 108
Clean Water Act, 33 U.S.C. 1251 et seq. - Section 104
Solid Waste Disposal Act, 42 U.S.C. 6901 et seq. - Section 8001
Pollution Prevention Act, 42 U.S.C. 13101 et seq. - Sections 6602, 6603, 6604, and 6605
National Environmental Policy Act, 42 U.S.C. 4321 et seq. - Section 102
Global Climate Protection Act, 15 U.S.C. 2901 - Section 1103
Federal Technology Transfer Act, 15 U.S.C. - Section 3701a

Research

U.S. Global Change Research Program Act of 1990
United Nations Framework Convention on Climate Change
National Climate Program Act of 1997

Objective 3: Reduce Stratospheric Ozone Depletion

By 2005, ozone concentrations in the stratosphere will have stopped declining and slowly begun the process of recovery. In addition, public education to promote behavior change will result in reduced risk to human health from ultraviolet (UV) overexposure, particularly among susceptible sub-populations such as children.

Key Program

(Dollars in Thousands)

	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Administrative Services	$16.1	$0.0	$0.0	$0.0
Facilities Infrastructure and Operations	$0.0	$489.3	$419.8	($69.5)
Legal Services	$99.3	$76.5	$82.1	$5.6
Management Services and Stewardship	$379.1	$98.9	$93.4	($5.5)
Multilateral Fund	$10,975.8	$9,575.8	$9,575.8	$0.0
Stratospheric Ozone Protection	$5,771.9	$5,602.7	$5,642.2	$39.5

Annual Performance Goals and Measures

Restrict Domestic Consumption of Class II HCFCs

In 2003 Restrict domestic consumption of class II HCFCs below 9,960 ODP-weighted metric tonnes (ODP MTs) and restrict domestic exempted production and import of newly produced class I CFCs and halons below 10,000 ODP MTs.

In 2002 Restrict domestic consumption of class II HCFCs below 15,240 ODP-weighted metric tonnes (ODP MTs) and restrict domestic exempted production and import of newly produced class I CFCs and halons below 60,000 ODP MTs.

In 2001 The 2001 results will be available after March 15, 2002.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Domestic Consumption of Class II HCFCs	On track	<15,240	<9,960	ODP MTs
Domestic Exempted Production and Import of Newly Produced Class I CFC s and Halons	On track	<60,000	<10,000	ODP MTs

Baseline: The base of comparison for assessing progress on the 2003 annual performance goal is the domestic consumption cap of class II HCFCs as set by the Parties to the Montreal Protocol. Each Ozone Depleting Substance (ODS) is weighted based on the damage it does to the stratospheric ozone - this is its ozone-depletion potential (ODP). Beginning on January 1, 1996, the cap was set at the sum of 2.8 percent of the domestic ODP-weighted consumption of CFCs in 1989 plus the ODP-weighted level of HCFCs in 1989. Consumption equals production plus

import minus export.

Montreal Protocol Fund

In 2003 Provide assistance to at least 60 developing countries to facilitate emissions reductions and toward achieving the requirements of the Montreal Protocol.

In 2002 Provide assistance to at least 60 developing countries to facilitate emissions reductions and toward achieving the requirements of the Montreal Protocol.

In 2001 The US provided assistance to 76 developing countries to facilitate emissions reductions toward achieving the requirements of the Montreal Protocol.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Assistance to Countries Working under Montreal Protocol	76	60	60	Countries

Baseline: In an average year the Multilateral Fund, created through the Protocol, approves projects to assist over 50 developing countries in their efforts to comply with the phaseout of ODSs.

Validation and Verification of Performance Measures

Performance Measure: Reductions in production and importation of Ozone Depleting Substances (ODSs).

Performance Database: Reported production, imports, exports, transformations, and allowance trades of ODSs are recorded in the Stratospheric Ozone Tracking System, and analyzed quarterly.

Data Source: Data are provided by producers, importers and exporters of ODSs. Some data are submitted as quarterly reports.

QA/QC Procedures: The Stratospheric Protection Program has a system in place to verify data from private external sources against data from the U.S. Customs. Additionally, the program has a three-point check of data transcription from the reports into the tracking system.

Data Limitations: None

New/Improved Data or Systems: The Stratospheric Protection Program is continuing to explore an improved system whereby electronic reporting would be possible and an automatic crosswalk could be designed to automatically copy hydrochlorofluorocarbons (HCFC) data to the separate HCFC threshold monitoring database.

Statutory Authorities

Clean Air Act (CAA), Title V (42 U.S.C. 7661-7661f), and Title VI (42 U.S.C. 7671-7671q)
The Montreal Protocol on Substances that Deplete the Ozone Layer

Objective 4: Protect Public Health and Ecosystems from PBTs and other Toxics

By 2006, reduce the risks to ecosystems and human health, particularly in tribal and other subsistence-based communities, from persistent, bioaccumulative toxicants (PBTs) and other selected toxins which circulate in the environment on global and regional scales.

Key Program

(Dollars in Thousands)

	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Administrative Services	$16.1	$0.0	$0.0	$0.0
Facilities Infrastructure and Operations	$0.0	$495.4	$515.9	$20.5
Global Toxics	$1,571.6	$1,522.8	$1,415.1	($107.7)
Global Trade Issues for Pesticides and Chemicals	$2,703.7	$3,091.2	$3,125.4	$34.2
Great Lakes	$0.0	$537.6	$0.0	($537.6)
Legal Services	$313.8	$382.4	$410.7	$28.3
Management Services and Stewardship	$0.0	$31.5	$26.2	($5.3)
POPs Implementation	$0.0	$0.0	$680.3	$680.3

Annual Performance Goals and Measures

Eval. Domest. Suitab. of Internal Consens. Testing

In 2003 Evaluate the domestic suitability of international consensus testing decisions made in the OECD International Screening Information Data Set (SIDS) program and obtain needed testing as required.

In 2002 Evaluate the domestic suitability of international consensus testing decisions made in the OECD International Screening Information Data Set (SIDS) program and obtain needed testing as required.

In 2001 The shortfall in the number of chemicals in this relatively young, voluntary program is due to a lack of committments from Industry, as well as debate within member countries on which chemicals should be brought forward.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Complete the review of testing needs for chemicals processed through the OECD-sponsored SIDS program	40	75	75	Test Reviews
Complete OECD harmonization	4	5		Test Guidelin
Prepare harmonization documents			5	Dft/Fnl Guidlns

Baseline: (1)Complete testing and data on 25 chemicals processed through the OECD sponsored SIDS program in 1998. (2) Guideline harmonization baseline is 82 test guidelines (health, ecosystem, exposure, physical and chemicals properties) and 32 in draft. (3)In addition to finalized guidelines: (a) Drafts of New Guidelines and Guidance documents sent out for member country review, (b) Drafts of revised Existing Guidelines and Guidance documents that have been sent out for member country review are included.

POPs Negotiation

In 2003 Reduce environmental exposure to US and selected Countries of concern from Persistent Organic Pollutants (POPs) through the implementation of the Stockholm Convention on POPs.

In 2002 Initiate priority activities, especially in developing countries, to implement the global convention on persistent organic pollutants (POPs)

In 2001 Three priority activities were initiated in developing countries to implement the newly concluded global convention on Persistent Organic Pollutants.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Number of POPs implementation activities supported.	3	3		activities
Develop baseline information on atmospheric transport of POP chemicals to sensitive US ecosystems.			1	station
Conduct source inventories in selected Asia-Pacific countries			4	inventories
50% of farmer-owned obsolete POP pesticide stockpiles are removed as a result of training, in priority countries and or regions in Central America.			5	training
Assist countries in the Carribean to address targeted PCB sources.			1	Mgmt. Plan

Baseline: With the signing of the global POPs convention in May 2001 EPA will work on domestic implementing legislation (e.g., a FIFRA amendment) and projects to support implementation by key developing countries (e.g., China). In FY2001 EPA worked with UNEP to identify regions (e.g., Sub-Saharan Africa, Central America, Southeast Asia) which would benefit from such support from EPA, and we have started projects on the basis of available funding. Whenever possible EPA will support projects which also promote compliance with the global Prior Informed Consent (PIC) regime and the international commitment to improve chemicals management capabilities, as set out in the Bahia Declaration from the Third Session of the Intergovernmental Forum on Chemical Safety in October 2000.

Lead Gasoline Phase-Out

In 2003 An additional two countries make national commitments to phase out the use of lead in gasoline.

In 2002 An additional two countries make national commitments to phase out the use of lead in gasoline.

In 2001 Target Met. Philippines and Vietnam have committed to lead phase-out. Also, EPA was an active player in achieving the "Declaration of Dakar," which is a statement by representatives of 25 Sub-Saharan African countries presenting a timeline for phasing lead additives out of gasoline.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Number of commitments to Pb phaseout	2	2	2	countries
Global reduction in Pb gasoline.	10	10	10	percent

Baseline: Fourteen countries have phased out the use of Pb gasoline. Twelve countries and the European Union are working on the phase out of Pb gasoline.

Verification and Validation of Performance Measures

Validating measurements under international capacity-building programs presents several challenges. Technical assistance projects, for instance, typically target developing countries, which often do not have sound data collection and analysis systems in place. Several of the Agency's activities under Goal 6, Objective 4 will over time provide environmental information. Non-technical projects, such as assistance in gaining support from donor countries and organizations must rely on more subjective measures of change. Data verification and validation for each of the key measures under Objective 4 are discussed below.

FY 2003 Congressional Performance Measure: Develop baseline information on atmospheric transport of POP chemicals to sensitive US ecosystems.

Performance Database: None- Manual Collection

Data Source: Project Specific

QA/QC Procedures: Verification does not involve any pollutant database analysis, but will require objective assessment tasks completed.

FY 2003 Congressional Performance Measure: Assist a target country in the Carribean to address targeted PCB sources.

Performance Database: None- Manual Collection
Data Source: Project Specific

QA/QC Procedures: Verification does not involve any pollutant database analysis, but will require objective assessment tasks completed.

Statutory Authorities

Pollution Prevention Act (PPA) (42 U.S.C. 13101-13109)
Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) sections 3,4,5,6,10,11,18,20,23,24,25,30 and 31 (7 U.S.C. 136a, 126a-1, 126c, 136d, 136h, 136i, 136p, 136r, 136u, 136v, 136w, 136w-5 and 136w-6)
Emergency Planning and Community Right-to-Know Act (EPCRA) section 313 (42 U.S.C. 11023)
Toxic Substances Control Act (TSCA) sections 4, 5, 6, 12, and 13 (15 U.S.C. 2603, 2604, 2605, 2611, 2612)
Clean Water Act (CWA) (33 U.S.C. 1251-1387)]
Clean Air Act (CAA)
Federal Food, Drug and Cosmetic Act (FFDCA).
Resource Conservation and Recovery Act (RCRA)
North American Agreement on Environmental Cooperation (NAAEC)
1996 Habitat Agenda, paragraph 43bb
U.S./Canada Agreements on Arctic Cooperation
1989 US/USSR Agreement on Pollution
1991 U.S./Canada Air Quality Agreement
1978 U.S./Canada Great Lakes Water Quality Agreement
1909 Boundary Waters Agreement
World Trade Organization Agreements
North American Free Trade Agreement

Objective 5: Increase Domestic and International Use of Cleaner and More Cost-Effective Technologies

Through 2005, integrate environmental protection with international trade and investment and increase the application of cleaner and more cost-effective environmental practices and technologies in the United States and abroad to ensure that a clean environment and a strong economy go hand-in-hand.

Key Program

(Dollars in Thousands)

	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request	FY 2003 Req. v. FY 2002 Ena.
Administrative Services	$16.1	$0.0	$0.0	$0.0
Commission for Environmental Cooperation - CEC	$3,269.0	$3,396.4	$3,535.3	$138.9
Environment and Trade	$1,700.0	$1,672.6	$1,844.3	$171.7
Facilities Infrastructure and Operations	$0.0	$815.6	$792.7	($22.9)
Global Toxics	$7.7	$0.0	$0.0	$0.0
International Safe Drinking Water	$384.4	$0.0	$0.0	$0.0
Legal Services	$581.4	$675.7	$725.6	$49.9
Management Services and Stewardship	$25.4	$51.0	$41.7	($9.3)
Regional and Global Environmental Policy Development	$1,784.8	$1,431.2	$1,331.3	($99.9)
Technical Cooperation with Industrial and Developing Countries	$3,400.2	$4,478.4	$4,330.1	($148.3)

Annual Performance Goals and Measures

Enhance Institutional Capabilities

In 2003 Enhance environmental management and institutional capabilities in priority countries.

In 2002 Enhance environmental management and institutional capabilities in priority countries.

In 2001 Target Met. EPA conducted environmental institutional building and enhanced the abilities of the following countries to protect their environments and those of the gloabal common: El Salvador, Nicaragua, Honduras, Mexico, China, Thailand, Eygpt, Indonesia, Vietnam, & Philippines.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Number of countries or localities (3) that have adopted new or strengthened environmental laws and policies	3			countries
Number of organizations (3) that have increased environmental planning, analysis, and enforcement capabilities	3			organizations
Number of organizations (3) that have increased capabilities to generate and analyze environmental data and other information	3			organizations
Number of organizations (3) that have increased public outreach and participation	4			organizations
Number of targeted sectors (3) that have adopted cleaner production practices	2			industry sector
Number of cities (3) that have reduced mobile-source based ambient air pollution concentrations	3			cities
Assist in the development or implementation of improved environmental laws or regulations in priority countries.		2	1	countries
Increase the transfer of environmental best practices among the U.S. and its partner countries and build the capacity of developing countries to collect, analyze, or disseminate environmental data.		3	3	countries
Increase the capacity of programs in Africa or Latin America to address safe drinking water quality issues.			1	countries

Baseline: EPA has assisted several entities within developing countries to implement improved environmental laws, employ best enviromental practices, adopt cleaner production practices and reduce ambient air pollution concentrations.

World Trade Organization - Regulatory System

In 2003 All trade agreements negotiated after 2001 contain environmental provisions.

Performance Measures:	FY 2001 Actual	FY 2002 Enacted	FY 2003 Request	Units
Trade agreements and world trade organization provisions contain environmental text			1	Agreements

Baseline: Currently, the World Trade Organization has no formal policy for involving the public in its decision making and dispute resolution processes.

Verification and Validation of Performance Measures

Validating measurements under international capacity-building programs presents several challenges. Technical assistance projects, for instance, typically target developing countries, which often do not have sound data collection and analysis systems in place. Several of the Agency's activities under Goal 6, Objective 5 attempt to improve this data gathering and analysis process. Non-technical projects, such as assistance in regulatory reform, frequently must rely on more subjective measures of change, such as the opinions of project staff or reviews by third-party organizations, including other U.S. government organizations, in judging the long-term efficacy of the assistance provided. Data verification and validation for each of the key measures under Objective 5 are discussed below.

FY 2003 Congressional Performance Measure: Assist in the development or implementation of improved environmental laws or regulations in developing countries.

Performance Database**:** None- Manual Collection

Data Source**:** Project Specific

QA/QC Procedures**:** Verification does not involve any pollutant database analysis, but will require objective assessment of: (1) tasks completed, (2) compliance with new regulation, and (3) progress toward project goals and objectives.

EPA works with developing countries to improve environmental laws and regulations. Tracking development and implementation of legislation presents few challenges because EPA project staff maintain close contact with their counterparts and any changes become part of a public record. Assessing the quality of the new or revised laws/regulations, the level of public participation and support for stronger regulations, and the long-term social impacts of legislation is more subjective. Aside from feedback from Agency project staff, EPA relies, in part, on feedback from its counterparts in the target countries and regions and from NGOs and other third parties in gauging the efficacy of its work on international legal and regulatory capacity-building. Because EPA works to establish long-term relationships with priority countries, the Agency is often able to assess environmental improvement in these countries and regions for a number of years following legal assistance efforts. Under its cooperative programs with US AID in Central America, EPA is developing a set of indicators to measure progress for each activity undertaken. These indicators should be in place in FY 2002.

FY 2003 Congressional Performance Measure: Increase the transfer of environmental best practices among the U.S. and its partner countries and build the capacity of developing countries to collect, analyze or disseminate environmental data.

Performance Database**:** None- Manual Collection

Data Source**:** Project Specific

QA/QC Procedures**:** Verification does not involve any pollutant database analysis, but will require objective assessment of: (1) tasks completed, (2) compliance with new regulation, and (3) progress toward project goals and objectives. Data on the performance of specific urban projects are compiled and recorded by the grantee after consulting bi-monthly with local, regional, and national urban environmental practitioners. The data are forwarded to and verified in writing by the EPA project officer.

New/Improved Data or Systems**:** Activities in support of this project may result in new or improved data collection systems in developing countries.

FY 2003 Congressional Performance Measure: Increase the capacity of programs in Latin America or Africa to address safe drinking water quality issues.

Performance Database**:** None-Manual Collection

Data Source**:** Project Specific

QA/QC Procedures**:** Verification does not involve any pollutant database analysis, but will require objective assessment of: (1) tasks completed, (2) compliance with new regulation, and (3) progress toward project goals and objectives. EPA is currently tracking output data for the International Safe Drinking Water Program (ISDWP) in Central America with plans to begin looking at measuring the longer term outcomes. On a quarterly basis, EPA collects data through EPA teams, in-country partners and cooperators on outputs such as number of people trained, number of pilot projects completed and number of workshops held. This information is validated through constant contact with the aforementioned groups and through on-site visits by EPA program managers. The information is also shared with donors, specifically USAID, through quarterly reports. The outcome measures of improved capacity of in-country partners and stakeholders to ensure safe drinking water for the communities are under development and will provide indicators of the longer term sustainability potential of the program.

EPA's ISDWP in Africa is currently in the start-up phase and the data collection process is under development.

Statutory Authorities

EPCRA section 313 (42 U.S.C. 11023)
PPA (42 U.S.C. 13101-13109)
World Trade Organization Agreements
North American Free Trade Agreement
North American Agreement on Environmental Cooperation
US-Canada Agreements
The Boundary Waters Treaty of 1909
1987 Great Lakes Water Quality Agreement
1997 Canada-U.S. Great Lakes Binational Toxics Strategy